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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,821	03/31/2004	Yuichi Ichikawa	9683/184	5312

7590 04/05/2006

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EXAMINER	
CAMPOS, YAIMA	

ART UNIT	PAPER NUMBER
2185	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/814,821	ICHIKAWA ET AL.	
	Examiner	Art Unit	
	Yaima Campos	2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/31/04, 5/19/05 and 8/31/05
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10/814,821 has a total of 5 claims pending in the application; there are 2 independent claims and 3 dependent claims, all of which are ready for examination by the examiner.

I. INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

II. STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION

As required bye **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on March 31, 2003 (Japan 2003-097143).

III. INFORMATION CONCERNING DRAWINGS

Drawings

3. The applicant's drawings submitted are acceptable for examination purposes.

IV. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT

4. As required by **M.P.E.P. 609(C)**, the applicant's submissions of the Information Disclosure Statements dated March 31, 2004, May 19, 2005 and August 31, 2005 are acknowledged by the examiner and the cited references have been considered in the examination

of the claims now pending. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

V. OBJECTIONS TO THE SPECIFICATION

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **-- Communication Device and Program for Trial Data --.**

VI. REJECTIONS NOT BASED ON PRIOR ART

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. **Claim 5** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

8. As per **claim 5**, Applicant has claimed a "a program product" for causing a computer to "execute" instructions in the preamble to these claims; this implies that Applicant is claiming a system of software, per se, lacking the hardware necessary to realize any of the underlying functionality. Therefore, claim 5 is directed to non-statutory subject matter as computer programs, per se, i.e. the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being

performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claim 4** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. As per **claim 4**, the limitation "said writing means" (line 2) renders this claim as vague and indefinite. It is not clear to the examiner whether applicants refer to "first writing means" or "second writing means." It appears to the examiner that applicants refer to "second writing means;" therefore, applicants might consider amending claim 4 to read – **said second writing means** – in line 2.

VII. REJECTIONS BASED ON PRIOR ART

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. **Claim 1** is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/815,187.

2. Initially, it should be noted that the present application and Application No. 10/815,187, have the same inventive entity. The assignee for both applications is NTT DOCOMO, INC..

3. Claimed subject matter in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as noted below. *See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).*

4. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See MPEP § 804.

5. Claim 1 is compared to claims 3 of application 10/815,187 in the following table:

Instant Application	**Application 10/815,187**
A communication device comprising:	An information processing device having (claim 1)
operation means;	content using means for reading contents instructed to be processed or executed from said cache memory means or said content storage means, and processing or executing said contents; (claim 1)
cache memory means	cache memory means (claim 1)
content storage means composed of nonvolatile memory	content storage means said contents are stored (claim 1)

Instant Application	Application 10/815,187
receiving means for receiving contents	acquiring means for acquiring contents which realize a function through processing or execution, (claim 1)
first writing means, when said receiving means receives contents, for writing said contents in a free space or a space, where some data is already stored, of said cache memory means;	first writing means for writing contents acquired by the acquiring means in a free space or a space, where some data is already stored, of said cache memory means, (claim 1)
and second writing means, when a command is issued using said operation means for storing contents processed or executed by said content using means, for writing said contents in said content storage means after reading said contents from said cache memory means	second writing means for writing contents acquired by said acquiring means in a free space or a storage space freed by said deleting means, (claim 3) **[wherein]** when a command is issued using said operation means for deleting contents stored in said content storage means, for freeing a storage space for storing said contents; (claim 3)

This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The double patenting rejection is also applicable to other claims in the application, for instance, claims 2-5.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. **Claims 1-2 and 5** are rejected under 35 U.S.C. 102(e) as being anticipated by Suzaki (US 2004/0078636).

14. As per **claims 1 and 5**, Suzaki discloses "A communication device comprising:" as **[a communication system to exchange and execute trial data (Column 1, paragraph 0002)]** "operation means;" **[Suzaki discloses this limitation as "processor (for example, a microprocessor unit: MPU)" (Column 2, paragraph 0027, lines 1-3)]** "cache memory means;" **[This limitation is disclosed by Suzaki as "disk cache 78 provided in RAM" (Column 3, paragraph 0038, lines 3-4)]** "content storage means composed of nonvolatile memory;" **[With respect to this limitation, Suzaki discloses "HDD 74" (Column 3, paragraph 0038, line 1)]** "receiving means for receiving contents;" **(*Page 9, paragraph 0048 of Applicant's specification identifies this means as "CPU 400"*) [With respect to this limitation, Suzaki discloses that "trial software and trial data are exchanged via various communication media" (Column 1, paragraph 002)]** "first writing means, when said receiving

means receives contents, for writing said contents in a free space or a space, where some data is already stored, of said cache memory means;" (***Pages 7 and 9, paragraphs 0034 and 0047 of Applicant's specification identifies this means as "CPU 400"***) **[With respect to this limitation, Suzuki discloses "MPU 72;" "A disk cache is a memory (usually a semiconductor memory) that is faster than the hard disk, that is used to hold data to enable hard disk data to be rewritten at high speed, for effecting high-speed access in cases where the same data is accessed a number of times, and for collectively writing to disk with an intentional delay" (Column 2, paragraph 0034, lines)]** "content using means, after said first writing means writes contents in said cache memory means, for processing or executing said contents;" (***Page 8, paragraph 0041 of Applicant's specification identifies this means as "CPU 400"***) **[With respect to this limitation, Suzaki discloses "MPU 72;" "software execution" which "enables trial software, trial data and mail data to be safely tried" Column, paragraph 0015, lines 10-14]** "and second writing means, when a command is issued using said operation means for storing contents processed or executed by said content using means, for writing said contents in said content storage means after reading said contents from said cache memory means" (***Pages 7 and 9, paragraphs 0034 and 0047 of Applicant's specification identifies this means as "CPU 400"***) **[Suzaki discloses this limitation as "MPU 72;" "when data is recorded on HDD 74 in accordance with a request from OS kernel 71 or the like, using the write-back method, data in a disk cache 78 provided in RAM is recorded via MPU 72" and explains that "a switch 73 is provided between MPU 72 and the HDD 74 that controls whether or not data flows there between" (Columns 2-3, paragraphs 0034 and 0038)]**.

15. As per **claim 2**, Suzaki discloses "A communication device according to claim 1," **[See rejection to claim 1 above]** "wherein: said receiving means receives trial information indicating that said contents are contents for trial use; and said first writing means, when said receiving means receives said trial information, writes said contents in said free space or said space, where some data is already stored, of said cache memory means" **[Suzaki discloses this concept as "a software execution method" that by "using the input and output means for computer system storage, enables trial software, trial data and mail data to be safely tried" (Column 1, paragraph 0015, lines 10-14) wherein "when writing to a first storage, writes via a disk cache of a predetermined capacity" and later performs write-back of data to "HDD 74" (Column 1, paragraph 0016 and Columns 2-3, paragraphs 00034 and 0038)]**.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzaki (US 2004/0078636) in view of Wong et al. (US 2004/0111443).

18. As per **claim 3**, Suzaki discloses "A communication device according to claim 1," **[See rejection to claim 1 above]** but fails to disclose expressly "determining means for determining whether a size of data readable in a free space of said content storage means is equal to or more than a data size of said contents stored in said cache memory means; and when said determining means determines that said size of data readable in said free space of said content storage means

is equal to or more than said size of data of said contents stored in said cache memory means, said second writing means writes in said content storage means said contents processed or executed by said content using means after reading said contents from said cache memory means."

Wong discloses "determining means for determining whether a size of data readable in a free space of said content storage means is equal to or more than a data size of said contents stored in said cache memory means;" ***(Page 9, paragraph 0048 of Applicant's specification identifies this means as "CPU 400")*** as **[a process for writing an object to main memory by a cache controller wherein "cache controller 44 first determines whether the object to be written can fit in the buffer 62" (Columns 5-6, paragraph 0060)]** "and when said determining means determines that said size of data readable in said free space of said content storage means is equal to or more than said size of data of said contents stored in said cache memory means, said second writing means writes in said content storage means said contents processed or executed by said content using means after reading said contents from said cache memory means" **[With respect to this limitation, Wong discloses that "if the object fits in the object buffer 62, the object is written to object buffer 62" (Columns 5-6, paragraph 0060)]**.

Suzaki (US 2004/0078636) and Wong et al. (US 2004/0111443) are analogous art because they are from the same field of endeavor of computer memory management.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the content trial system which first stores contents in a cache and then transfers these contents to a content storage as described by Suzaki and determine if there is enough space in a content storage before transferring data to this content storage as taught by Wong.

. The motivation for doing so would have been because Wong teaches that determining whether there is enough free space in memory before transferring data **["increases caching performance of persistent memory" (Column 1, paragraph 0003) and prevents system crashes as when there is not enough space in memory, the system prevents writing new objects to memory]**.

Therefore, it would have been obvious to combine Wong et al. (US 2004/0111443) with Suzaki (US 2004/0078636) for the benefit of creating a content trial system to obtain the invention as specified in claim 3.

19. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzaki (US 2004/0078636) in view of Wong et al. (US 2004/0111443) as applied to claim 3 above, and further in view of Spencer et al. (US 2003/0014496).

20. As per **claim 4**, the combination of Suzaki and Wong discloses "A communication device according to claim 3," **[See rejection to claim 3 above]** Wong further discloses "operation means for deleting one or more contents stored in said content storage means, said second writing means, reserves a free space in said content storage means by making it impossible to read said contents from said content storage means and making a space in said content storage means storing said contents available for storing new data, and causes said determining means to make a determination" as **["cache controller 44 purges entries from persistent memory 50 that are older than a particular age, and moves entries buffered in main memory 48 having dates greater than a particular age to persistent memory 50" and explains that "purging entries from persistent memory 50 frees up disk space, and moving entries from main memory 48 frees up buffer space" (Column 5, paragraph 0059)]** but does not disclose

expressly that having "inquiring means, when said determining means determines that said size of data readable in said size of free space of said content storage means is smaller than said size of data of said contents stored in said cache memory means, for prompting a user to delete one or more contents stored in said content storage means."

Spencer discloses "inquiring means, when said determining means determines that said size of data readable in said size of free space of said content storage means is smaller than said size of data of said contents stored in said cache memory means, for prompting a user to delete one or more contents stored in said content storage means" (***Pages 9-10, paragraph 0048 of Applicant's specification identifies this means as "CPU 400"***) as **[a device which downloads files through a computer network (Column 3, paragraph 0027) wherein "download manager 120;" (Figure 1) completes "the instructions for remote management can include instructions to add specific media content to existing media content on the digital playback device, or instructions to remove specific media content from the digital media playback device. The instructions to remove specific media content can be generated in response to a request form a user or be automatically generated" (Column 2, paragraph 0015) and provides and example in which when there is not enough space to download a file, the user is asked to delete on or more files residing on the device and the user is able to submit a command to delete selected files (Columns 10-11, paragraph 0084)]**.

Suzaki (US 2004/0078636), Wong et al. (US 2004/0111443) and Spencer et al. (US 2003/0014496) are analogous art because they are from the same field of endeavor of computer memory management.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the content trial system which first stores contents in a cache and then transfers these contents to a content storage as described by Suzaki and determine if there is enough space in a content storage before transferring data to this content storage as taught by Wong, and further prompt a user to delete contents of a storage device when there is not enough space to store new data as taught by Spencer.

The motivation for doing so would have been because Spencer teaches that a user prompted to delete contents of a storage device when there is not enough space to store new data **[in order to free space when new files must be downloaded to a storage device (Columns 10-11, paragraph 0084)]**.

Therefore, it would have been obvious to combine Spencer et al. (US 2003/0014496) with Suzaki (US 2004/0078636) and Wong et al. (US 2004/0111443) for the benefit of creating a content trial system to obtain the invention as specified in claim 4.

VIII. RELEVANT ART CITED BY THE EXAMINER

21. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

22. The following reference teaches execution of trial data.

U.S. PATENT NUMBER

US 2004/0230641

IX. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

23. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

24. Per the instant office action, claims 1-5 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaima Campos whose telephone number is (571) 272-1232. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

IMPORTANT NOTE

26. If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Donald Sparks, can be reached at the following telephone number: Area Code (571) 272-4201.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 30, 2006

Yaima Campos
Examiner
Art Unit 2185

DONALD SPARKS
SUPERVISORY PATENT EXAMINER